

Listing of the Claims:

1.-46. (Cancelled).

47. (previously presented) A fuel cell system comprising a fuel source, an anode chamber, a cathode chamber in gaseous communication with the anode chamber, and a protonically conducting membrane electrolyte.
48. (previously presented) The fuel cell system according to claim 47, wherein no liquid is communicated between the anode chamber and the cathode chamber.
49. (previously presented) The fuel cell system according to claim 47, further comprising at least one conduit for gaseous communication between the anode chamber and the cathode chamber.
50. (previously presented) The fuel cell according to claim 49, further comprising a valve provided with the conduit to regulate gaseous communication between the anode chamber and the cathode chamber.
51. (previously presented) The fuel cell according to claim 47, wherein the fuel source is comprised of a concentrated methanol solution.
52. (previously presented) The fuel cell according to claim 51, wherein the solution includes a methanol concentration of greater than 50%.
53. (previously presented) The fuel cell according to claim 47, further comprising a fuel concentration sensor integrated into the anode chamber.
54. (previously presented) A fuel cell system comprising an anode chamber having a fuel and a cathode chamber in gaseous communication with the anode chamber via a conduit, wherein no liquid communication occurs between the anode chamber and the cathode chamber.

55. (previously presented) A method for encouraging water and air exchange in fuel cell system, comprising collecting an effluent gas produced in the anode chamber of the fuel cell and exhausting the collected gas through the cathode chamber to the ambient environment.
56. (previously presented) An apparatus for encouraging water and air exchange in a fuel cell system, comprising collecting means for collecting an effluent gas produced in the anode chamber of the fuel cell and exhausting means for exhausting the collected gas through the cathode chamber to the ambient environment.
57. (previously presented) A method of inducing airflow in a cathode chamber of a fuel cell system comprising directing an effluent gas produced in an anode chamber of a fuel cell at a pressure out of the fuel cell via a nozzle provided in an outlet in a cathode chamber of the fuel cell, wherein gases in the cathode chamber surrounding the outlet are induced to flow out the outlet area by the flow of the effluent gas.
58. (previously presented) An apparatus for inducing airflow in a cathode chamber of a fuel cell system comprising directing means for directing an effluent gas produced in an anode chamber of a fuel cell at a pressure out of the fuel cell via a nozzle provided in an outlet in a cathode chamber of the fuel cell, wherein gases in the cathode chamber surrounding the outlet are induced to flow out the outlet area by the flow of the effluent gas.